

O P E R A T I N G I N S T R U C T I O N

JAESPA - VERTICAL MITRE BANDSAWING MACHINE MODEL V 380 DG and V 380 DGH

Manufacturer: JAESPA - Maschinenfabrik Karl Jäger GmbH
P.O. Box 12 54 D-34283 Spangenberg
Jahnstr. 21 D-34286 Spangenberg

Technical

Data:	Saw motor	kW	2,2
	Hydraulic motor	kW	0,37
	Coolant pump	kW	0,12
	Chip brush	kW	0,09 (on request)
	Sawband speed	m/min.	17 - 100
	Sawband dimensions	mm	4.250 x 25 x 0,9 or
		mm	4.250 x 32 x 1,1
	Material support height	mm	950
	Cut-off width with Cutting stroke	mm	380
	Coolant tank	ltr.	50 (on request)
	Hydraulic tank	ltr.	5

In case of any questions contact
our service department.

Operator : + 49-5663-5050
Fax : + 49-5663-50530/40
Machine Service: + 49-5663-50532

Please always indicate the serial
number shown on the machine plate.

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I M P O R T A N T I M P O R T A N T I M P O R T A N T

S A F E T Y I N S T R U C T I O N S

PLEASE PAY ATTENTION TO THE FOLLOWING GUIDELINES:

- A: The machine must be operated by qualified personnel only. Operating the machine can be dangerous if put to improper use. A bandsawing machine has an especially high risk of injury.
- B: The operator/s of the machine has/have to get familiar with the operation and maintenance of the machine and thoroughly read the operating instruction.
- C: When doing set-up or maintenance work the **main switch** must be put to **OFF** position and it must be taken care that the switch cannot be actuated by any unauthorized person.
- D: Before switching on the machine, mount all protective covers.
- E: Do not touch the running sawband.
- F: Always switch off the machine when it is stopped.
- G: Modifications on the machine which influence the safety must be reported immediately.
- H: The operator is obliged to operate the machine in perfect condition only.
- I: Do not remove any safety devices, such as sawband protection, as this is bearing a very high injuring danger.
- J: It is generally recommended to wear protective gloves. When changing the sawband, **ALWAYS** wear gloves.
- K: The main power supply must be embedded in such a way that the cable cannot be squeezed.
- L: Waste disposal of coolant must be made in accordance with the corresponding regulations or biodegradable coolant should be used.
- M: When changing oil or doing any kind of maintenance work, always keep ready an oil-absorbable medium.

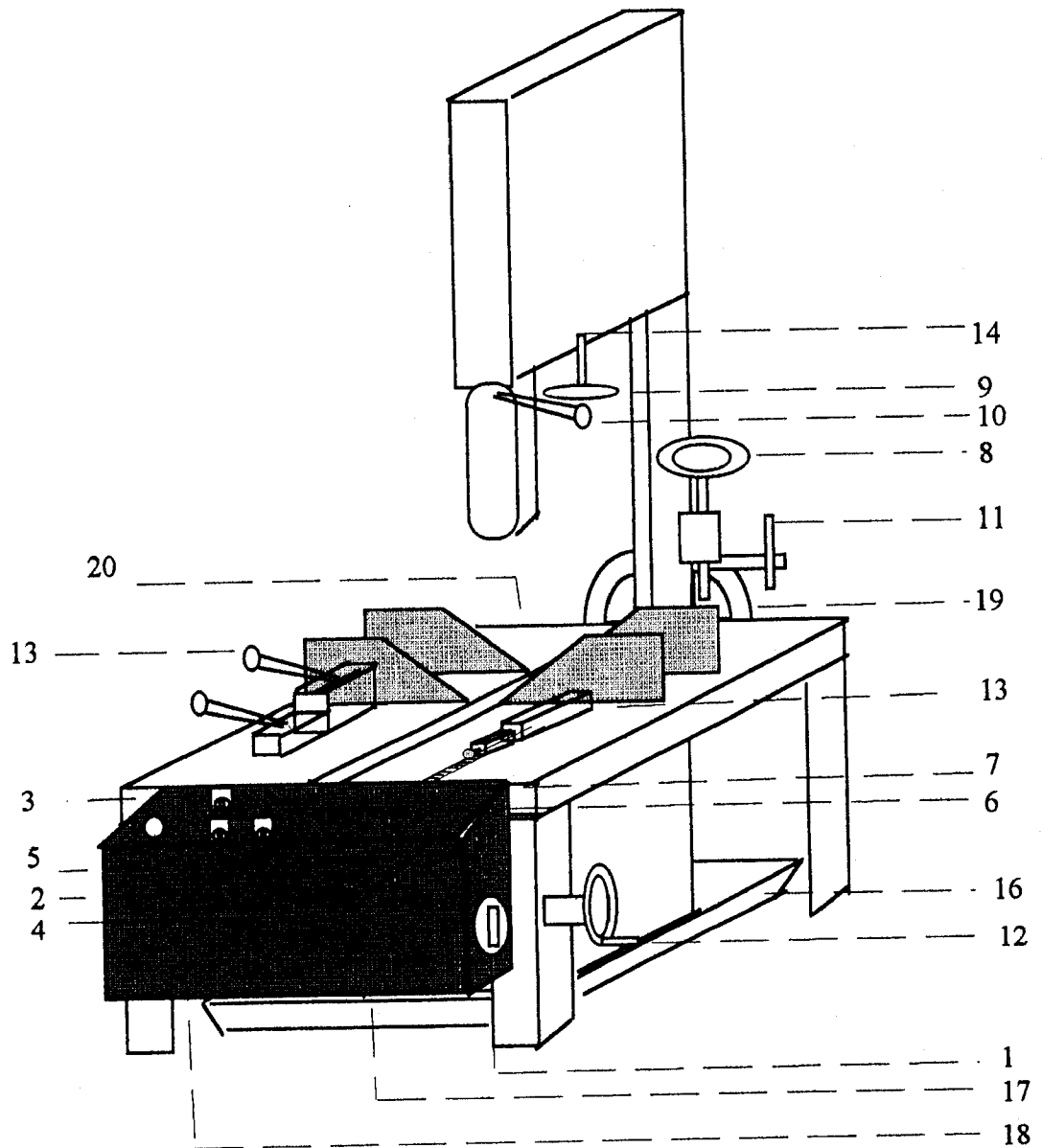
OPERATING ELEMENTS

- 1 = Main switch
- 2 = Start/stop
- 3 = Selector switch "Forward/Reverse"
- 4 = Selector switch "Coolant on/off"
- 5 = Emergency stop
- 6 = Regulating valve "Sawframe feed"
- 7 = Chart indicating approx. values for machine adjustment
- 8 = Adjustment of sawband speed
- 9 = Sawband tension
- 10 = Clamping of guide rod for height adjustable sawblade guide
- 11 = Clamping of swivel bearing for mitre cutting
- 12 = Feed force adjustment
- 13 = Material clamping via eccentric lever for model V 380 DG
- 13 = Material clamping, hydraulically and on both sides for model V 380 DGH
- 14 = Sawblade tension indication
- 15 = Digital indication of mitre cuts (optional equipment)
- 16 = Chip pan
- 17 = Power pack
- 18 = Switch cabinet
- 19 = Cutting angle indication with scale

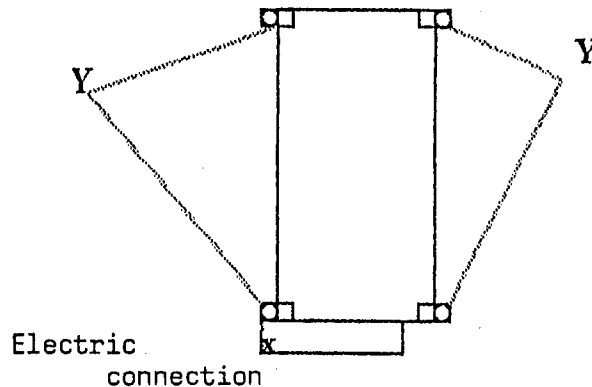
Only for model V 380 DGH

- 20 = Power pack for model V 380 DGH
- 21 = Hydraulic On/Off
- 22 = Swivelling sawframe to left
- 23 = Release clamping
- 24 = Swivelling sawframe to right
- 25 = Speed regulation of sawframe swivelling
- 26 = Reset key for calibration of digital cutting angle indication
- 27 = Pilot lamp "Sawframe in home position"
(this position enables the swivelling of sawframe)
- 30 = Selector switch for different operating cycles

Operating Elements



1. Installation and connection of the machine:



Install the machine according to the foundation drawing and align it at the points "Y". The anchorage on the hall floor can be done by using goliath plugs SL M 16. All bright parts of the machine have been protected in the factory. This protection should be removed by using a detergent or petroleum. For safe transport of the machine the sawframe has been bolted with a safety device. Do not forget to remove this !

2. Electrical connection

Details about the electrical equipment are shown on the wiring diagram. For the power supply a cable $5 \times 2,5 \text{ mm}^2$ must be embedded and connected to the respective terminals in the switch cabinet pos. "X" (see above sketch). The supply line must be embedded shock- and waterproofed. In case a change of the phase-sequence is necessary, two current-carrying cables must be exchanged. For protection of the machine, a fuse of 20 Amps. is necessary in the power supply at 400 V.

3. Preparing the machine for operation

The machine has been delivered with a complete oil filling. Please check anyway the oil levels in the hydraulic tank and on the drive gear. Oil level in hydraulic tank = up to the middle of the oil level gauge. Operating pressure = 45 bar. Now re-fill sufficient, but max. 30 ltr. coolant emulsion. The mixture ratio goes by the rules of the cooling agent manufacturer. We recommend a mixture ratio of approx. 5%. For cleaning, the coolant tank may be opened. (Coolant attachment = optional equipment).

4. Commissioning

Actuate main switch (item 1)

Check sawband tension; if necessary, regulate the tension up to the indicator position (item 14 + 21)

Attention: Machine will not start if sawband is not tensioned properly.

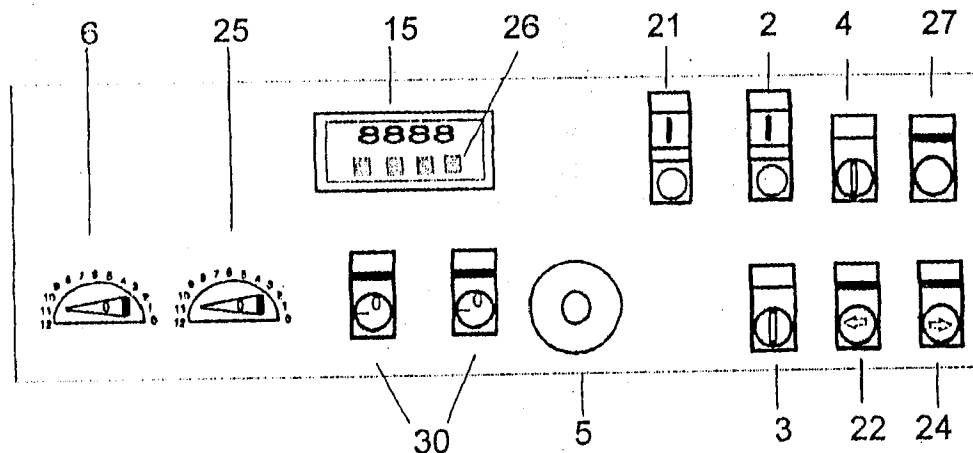
Put selector switch "Forward/reverse" to **Reverse**. Machine now travels back in rear position.

The phase sequence can be checked by operating **Start/Stop** key switching on the machine and enabling to check the sawblade tracking. In case of wrong cutting direction:

- switch off machine
- **take off fuse in feed line**
- exchange two phases at terminal box

Operation of model V 380 DGH

- Put on **workpiece** and push both clamping jaws manually to the material and engage hydraulic material clamping into the nearest position to material
- Adjust regulating valve for sawframe feed to **zero**
- Adjust **cutting angle**. Release hydraulic clamping by means of selector switch and swivel sawframe to required angle position to left or right by means of push buttons. A regulating valve enables a jerkless swivelling. For **hydraulic clamping** switch selector switch to clamping.
- Adjust **upper sawband guide** to material height.
Attention: Please take care of clamping jaw height
- Switch on machine by **start** key
- Regulate **sawband speed** by handwheel at machine column according to scale (m/min)
- Check **coolant** resp. **spray mist feed**
- Adjust **cutting feed** pos. 12 according to scale (kg)
- Open **regulating valve** slowly and control cutting feed
- In the beginning of the cut it may be necessary to readjust the feed speed
- On **completed** cut the sawframe automatically returns into home position. material clamping releases and machine shuts-off completely.
- For the next cut, first switch on hydraulic and then commence the cycle by **Start**.



See next page for further operating cycles

Operating cycles which can be preselected by means of the two selector switches:



Pos. 30

Position 0 and 0

Machine cuts until end of material
Saw motor shuts off
Sawhead moves backward and vices open

Position 0 and I

Machine cuts until end of material
Saw motor shuts off
Sawhead moves backward and vices remain closed

Position I and I

Machine cuts until end of material
Saw motor shuts off, vices remain closed
Sawhead remains in this position and can be moved backward by pushing the selector switch "Sawhead forward/backward" (pos. 3)

Position I and 0

Machine cuts until end of material
Saw motor shuts off, vices open
Sawhead remains in this position and can be moved backward by pushing the selector switch "Sawhead forward/backward" (pos. 3)

The vices can be opened/closed with the right-hand selector switch when sawhead is in rear position

9. Sawblade cleaning brush (optional equipment)

The machine is equipped with a sawblade cleaning brush driven by electric motor. Depending on wear of the brush as well as after each sawblade change the brush has to be readjusted. Please release the support at clamping lever and shift the brush as close to the sawblade that the brush tips touch the teeth gullet slightly. A well adjusted cleaning brush essentially influence a clean machine as well as the efficiency of the sawblade.

10a. Adjustment of cutting angle

The machine is provided for mitre cuts in the range of 90° to 45° to both sides.

Release clamping on the rear side of the machine. The clamping rod is connected to the machine table. Now the sawframe can be swivelled easily. A digital readout at the machine column indicates the adjusted cutting angle.

Attention: When swivelling the sawframe please take care of the adjustment of upper sawblade guide which may not touch the material or the clamping vices. Otherwise the guide rod will be damaged.

After adjustment of requested cutting angle, re-clamp sawframe properly.

10b. Hydraulic adjustment of cutting angle

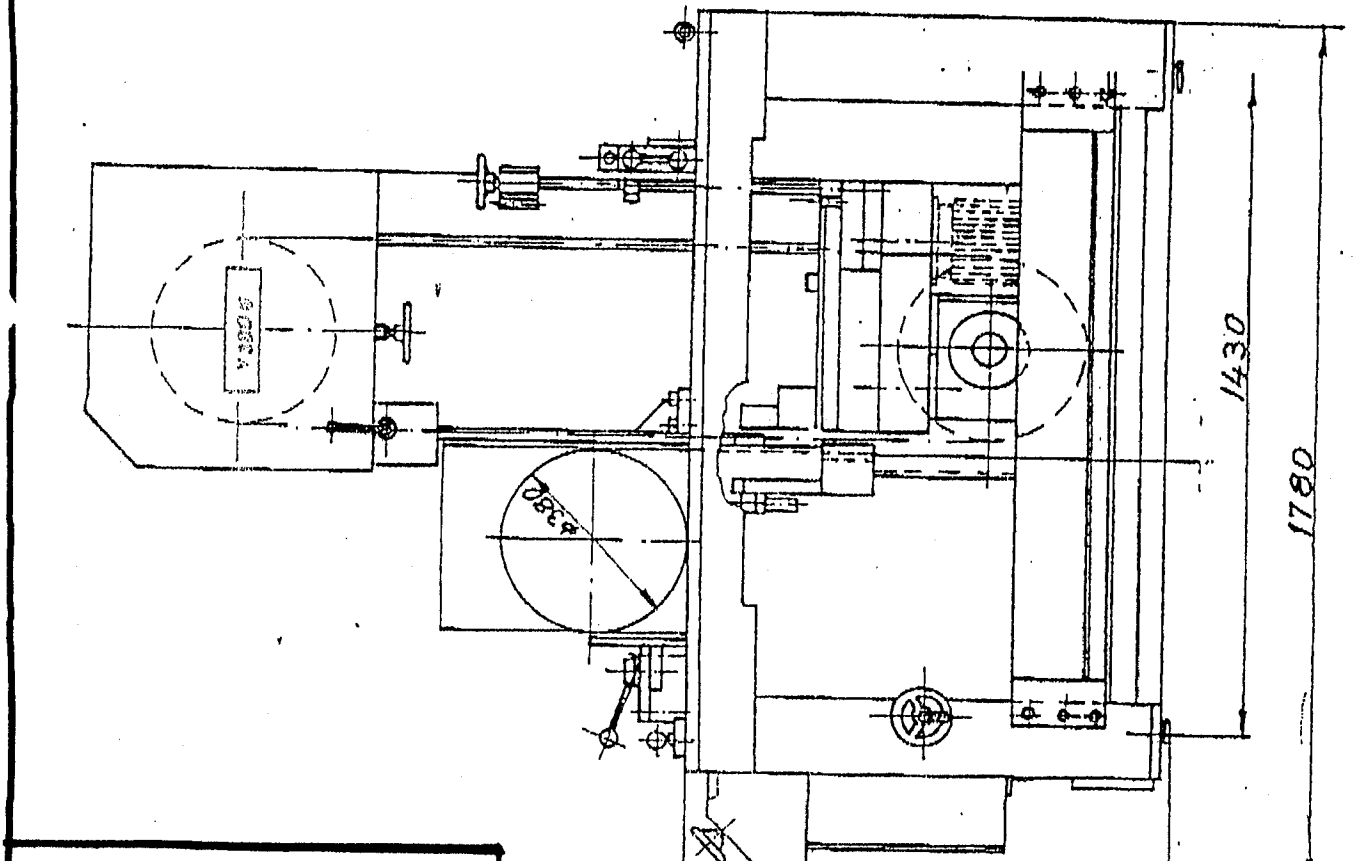
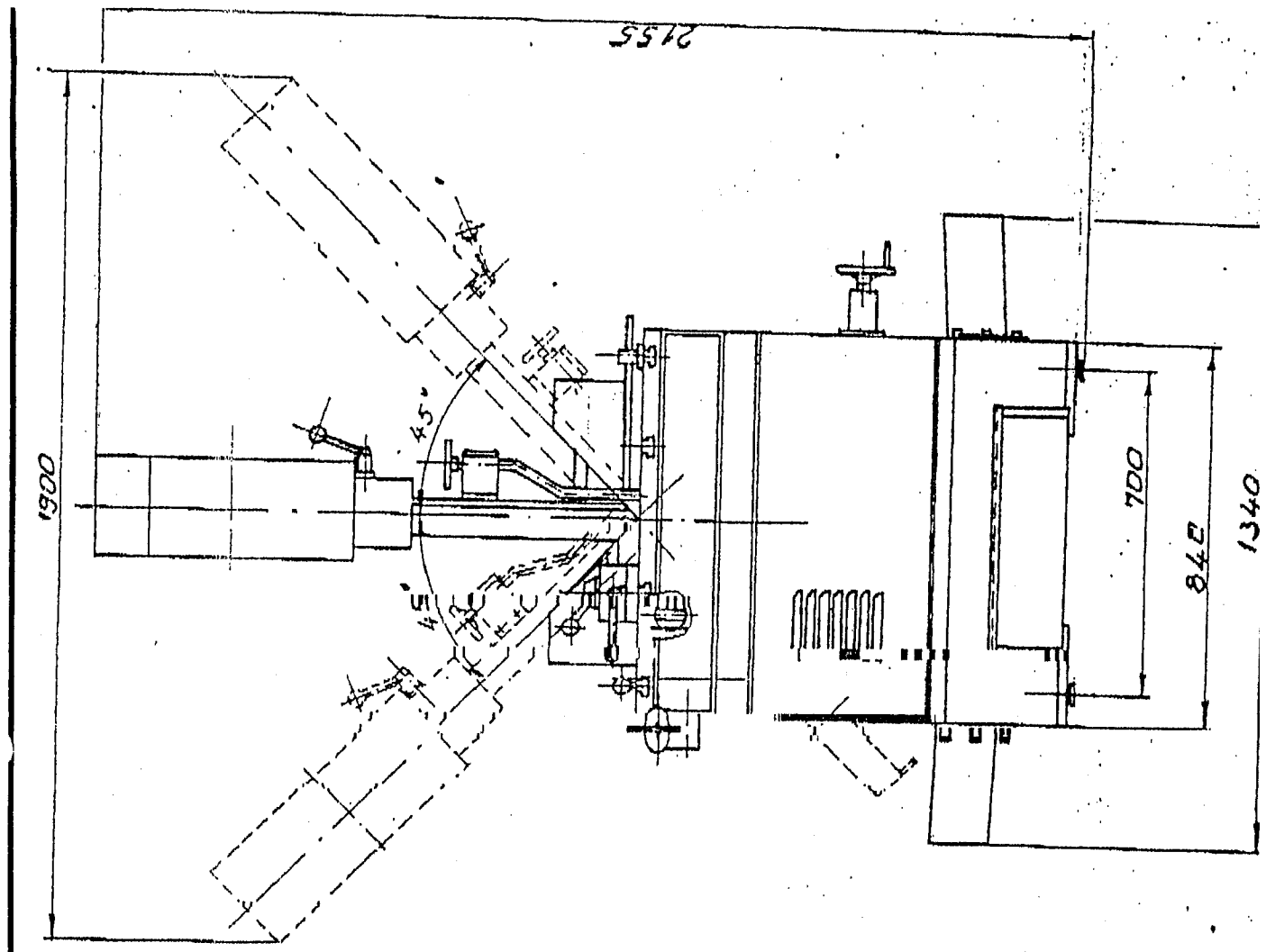
- Selector switch "Clamping" in operating panel to position "Clamping 0"
- Operate push button left or right and at the same time control resp. adapt moving speed by means of regulating valve
- Swivel sawframe to required position and reclamp it by switching selector switch to "Clamping I" position.

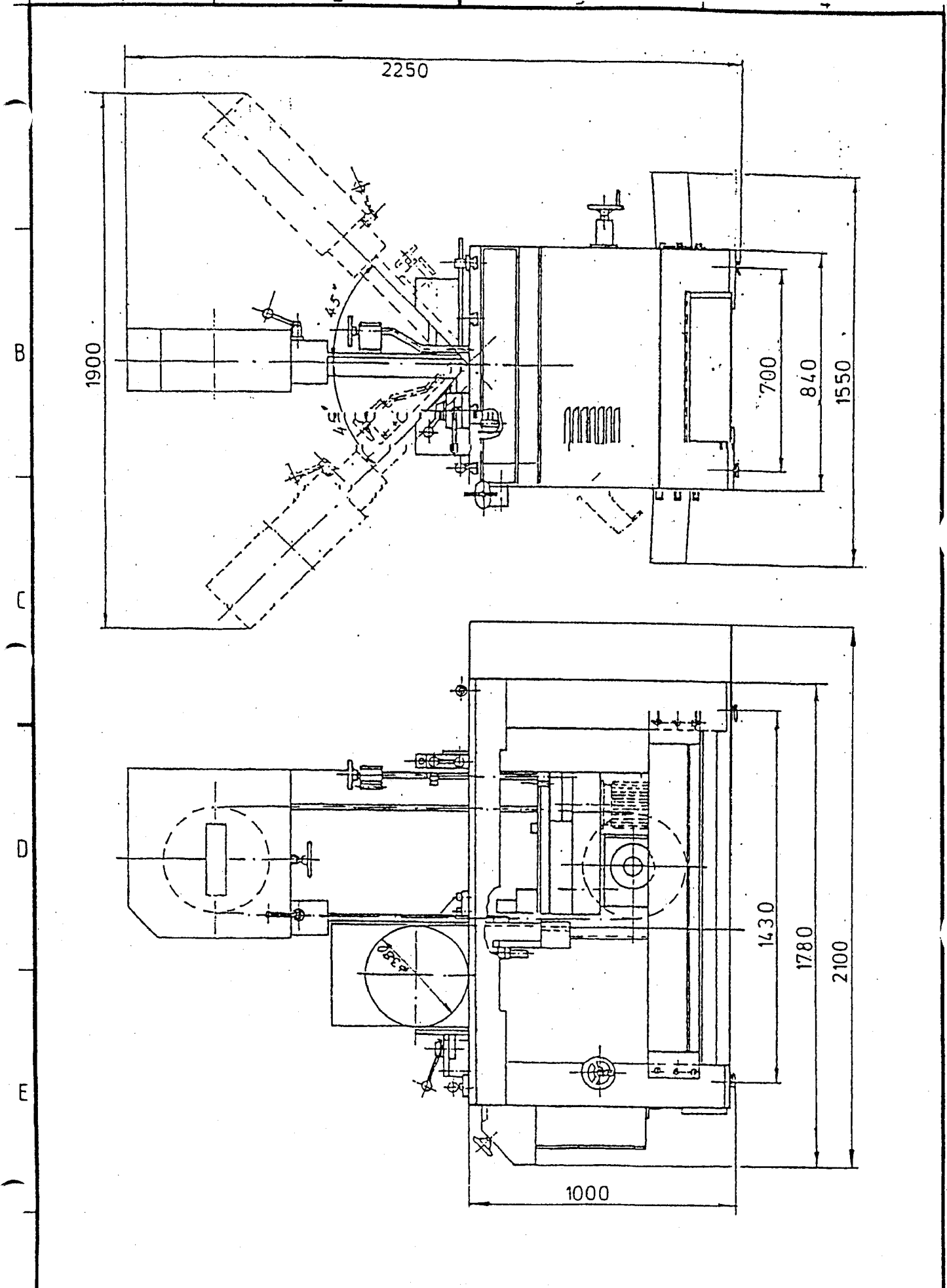
After swivelling a readjustment of upper guide to required height is absolutely necessary.

11. Digital cutting angle indication

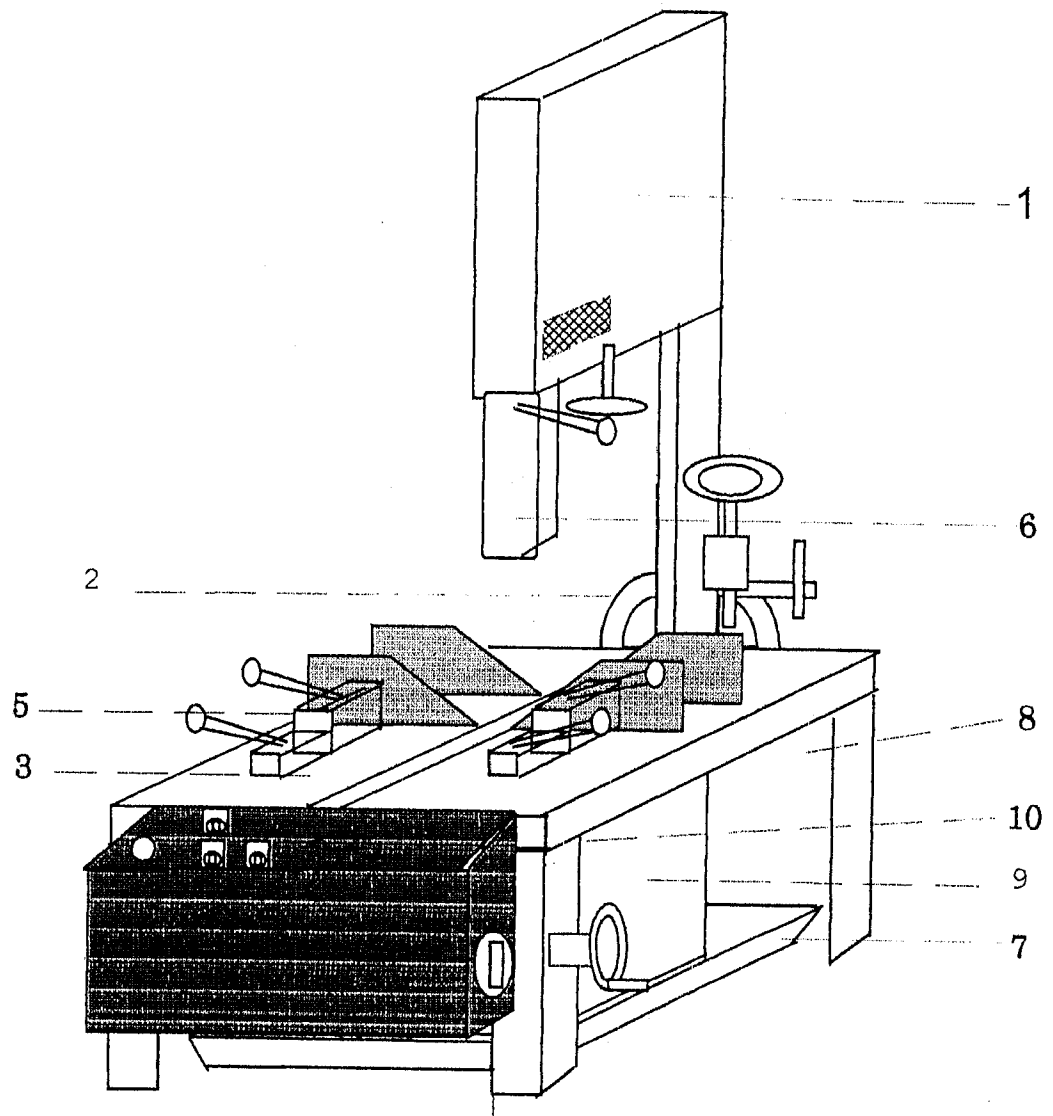
- Your machine has been equipped with a digital cutting angle indication
- Please effect cutting angle adjustment as described above
- Corresponding cutting angle can now be read off at digital indication
- **Reset:** (adjustment of cutting angle indication after power failure)
At first swivel sawframe to the right 30° angle position (final position). In this position, please operate "Reset" marked with * at the right side of the key foil. Now the digital indication must show the correct angle of 30°.

Attention: Modification of factory stored values is not allowed !!!





Lubrication chart



Jaespa-Maschinenfabrik Karl Jäger GmbH

Postfach 1254 · D-34283 Spangenberg



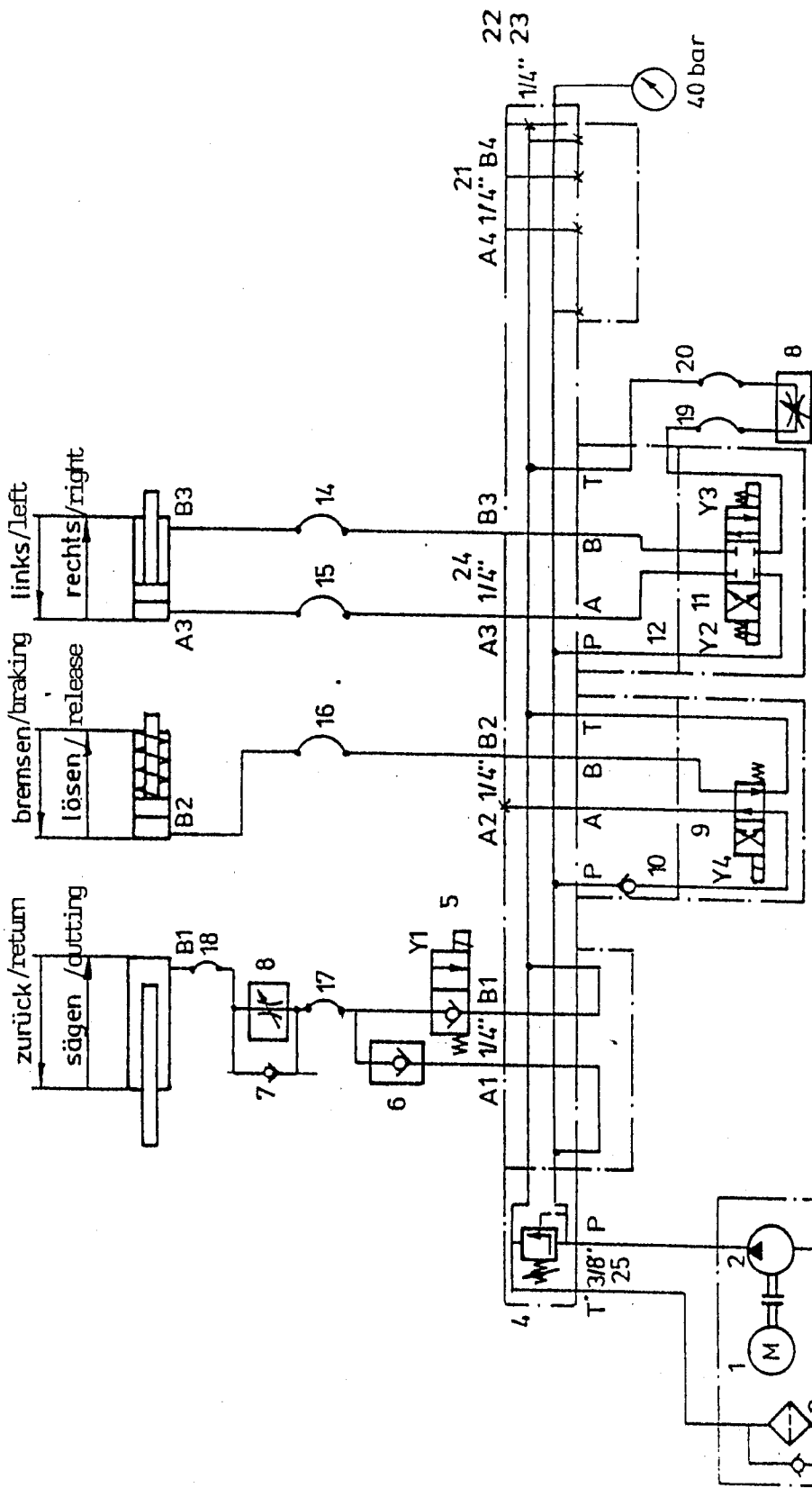
Lubrication chart

V 380 DGH

Pos.	Place of Lubrication	Lubricant	Interval
1	Bearing bandsaw wheel	Lubrication grease Li with soap DIN 51818	monthly
2	Pivot bearing for angle adjustment	Lubrication grease Li with soap DIN 51818	monthly
3	Guideway for for horizontal movement	Gauge oil and slushing oil 68 CGLP DIN 51502	weekly
4			
5	Guideway for clamping jaws	Gauge oil and slushing oil 68 CGLP DIN 51502	weekly
6	Guideway for guide arm	Gauge oil and slushing oil 68 CGLP DIN 51502	weekly
7	Coolant tank	Coolant	control
8	Hydraulic tank	Hydraulic oil HLP 46 DIN 51524 part 2	control
9	Gear	Life time greased	monthly control
10	Chip brush shaft	Lubrication grease Li with soap DIN 51818 Lubricate until grease comes out of the bushings	weekly

Sägevorschub Schwenkbremse Schwenken

32-400 Sawhead feed
 50-5 Swivelling brake
 63-22-210 Swivelling



P = 40 bar
 Q = 1,7 l/min
 P = 0,25 kW
 V = 10 l

A B C D E

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Beard	30.09.	Hand
Sepr		

Hydraulic complete

Jaespa-Maschinenfabrik Karl Jäger GmbH

Postfach 1254 · D-34283 Spangenberg



Hydraulic complete
V 380 DGH

9410-60.00-000

Item	Qty.	Drwg.-No.	Description
1	1		Hydraulic pump CO 27 X Q=1.77 l/min., p=17,5 mPa
2	1		Electric motor Mo-71A-4D, P=0,25 kW n=1380 UpM, B3, B4
3	1		Filter 1-16/25/K
	1		Filter element 558602.00-02
4	1	0002-18.09-210	Pressure relief cartridge 0532 002 042
5	1		2/2 way valve 920 1800.0701;DN 224/00
6	1	0002-18.10-008	Non-return valve 15/E-52/L8 RD
7	1	0002-18.10-009	dto. 15-53/L8
8	1	9330-63.10-000	Throttle valve (W320GHA 6310-00)
9	1	0002-18.12-422	4/2 way valve 4/2 WEF 42 A06 EZ G024
10	1	0002-18.10-020	Non-return valve HR OP 06 C1
11	1	0002-18.12-420	4/3 way valve 4/3 WEE 43 G06 EZ G024
12	1	9410-61.00-029	Intermediate plate (V 380 GHA 6100-29)
13	1		Oil filler
14	1	0002-18.07-748	Hydraulic hose PHD 106x1150, Ø8 PN 06 FL-06 FL 90
15	1	0002-18.07-746	dto. PHD 106x800, Ø 8
16	1	0002-18.07-749	dto. PHD 106x1650, Ø 8

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Hydraulic complete

9410-60.00-000

Item	Qty.	Drwg.-No.	Description
18	1	0002-18.07-746	dto. PHD 106x800, Ø 8
19	1	0002-18.07-752	dto. PHD 106x2200, Ø 8 PN 06 FL
20	1	0002-18.07-751	dto. PHD 106x2150, Ø 8 PN 06 FL-06 FL 90
21	3	0002-19.15-006	Screw plug 15-34/R 1/4"
22	1		Pressure gauge connecting screwing ZS 15-23/L8R
23	1	0002-18.01-062	Pressure gauge 0 - 60 bar, R 1/4" connection rear side
24	8	0002-19.25-001	Straight screwing 15-01/L8 RB R 1/4"
25	2	0002-19.25-405	Angle screwing 15-07/L12 R 3/8"